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RECENT DISCUSSION OF THE CAPITAL
CONCEPT.

To most readers the reopening of the question as to the concept of capital will seem to call for an apology. If after so much discussion the fundamental definitions have not been generally agreed upon, some will say that further argument on terms and concepts is a waste of time. While practical questions of great importance await profounder study, impatience of metaphysical quibbling is pardonable ; but in recent years many students have felt that there was need of earnest effort to make clearer and more consistent the fundamental concepts. These are the tools which aid men to think on economic subjects. A flaw in these concepts, an unsuspected ambiguity in a word or phrase, not only mars the conclusions of the student, but affects the popular judgment on the most practical questions. The circumstances and special problems of former generations have caused the grouping of unharmonized ideas under one term ; and it is the business of the economist to measure, mark, and correct the con-

cepts, to make the parts consistent with each other and the whole fitted to the needs of social discussion. The writer believes that there is no economic term to which this statement applies more fully than to capital, and this belief is the apology for the present paper. The concept of capital holds a central place in every economic system, and on its treatment have always depended the leading categories in the theory of economics. All agree, whatever definition may be held, that this is increasingly "a capitalistic age." The place, therefore, of the concept in all practical problems is growing more and more dominant; and a better definition of it is the most urgent need of the abstracter branch of economic science.

I. BÖHM-BAWERK.

A point of departure admirably fitted for our purpose is found in the *Positive Theory of Capital* of Böhm-Bawerk, which was given to the English reading public in 1891, and at once gained a large following. There are several advantages in beginning here. As the author's purpose was to present not only a theory of interest, but, as the title indicates, a Positive Theory "of Capital," we get the most typical cross-section of the study. We start with the known; and we direct our criticisms not against abandoned errors, but against views widely accepted.

Böhm-Bawerk undertook in his two large volumes to deal thoroughly with the theories of interest, and, to do so, was led to deal with the concepts of capital; for, thought he, it is capital for which interest is paid. However much he disputed the relation of production and interest, he had no doubt, in undertaking his study,* as to the relation of capital and interest. Interest is the yield of capital in the broader sense, and capital the source of

* We will note later his abandonment of this idea, calling the rent of land "interest" (*Positive Theory*, 355) and ascribing interest to all consumption goods, even those not included in capital. *Ibid.*, 350.

interest. They are correlative terms. To clear the field for his own concept of capital, Böhm-Bawerk, therefore, passes in review the various conceptions of capital that have been employed. He begins by following the historical order,* and later groups the concepts in logical order.† In the chapter on historical development he begins with a mention of the mediæval view of capital as "an interest-bearing sum of money," gives a few words to Turgot's "saved goods" (a very inadequate, not to say mistaken, interpretation of Turgot's view), and passes on to Adam Smith's division of these into consumption goods and capital that brings an income. In Smith's treatment the author thinks he finds the germ of the productivity theory of interest, which he considers false. Smith, in giving two varieties of the concept,—capital as a means of acquisition to the individual, and capital as a means of social production,—has in reality given, says Böhm-Bawerk, "two entirely independent conceptions, resting substantially on quite different foundations, and only connected externally by a very loose bond."‡ After devoting several pages to discussing this difficulty, the author abandons the historical order, and enumerates eight other variations of the concept: Hermann's "every durable foundation of a utility which has exchange value"; Menger's "groups of economic goods of higher rank [productive goods] now available to us for future periods," Kleinwächter's "tools of production"; Jevons's "sustenance of the laborer"; Marx's "instruments for the exploitation of the laborer"; Knies's goods available to satisfy wants in the future; Walras's goods which can be used more than once; McLeod's "value of the productive power contained in material goods."§ These are discussed more at length in Chapter V., the most important contentions being that the distinction between consumption goods and what he calls "the true instrument of production" is essential;

* *Positive Theory*, p. 24, ff.

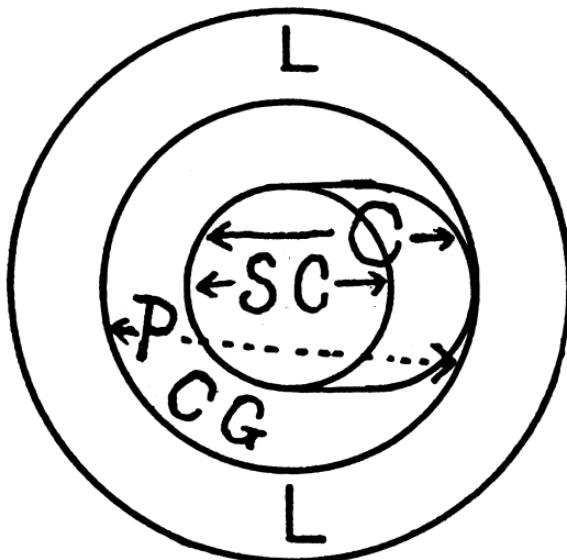
† *Ibid.*, p. 27.

‡ *Ibid.*, p. 42, ff.

§ *Ibid.*, p. 31, ff.

that labor must not be confused with capital; that land must for many important reasons also be kept distinct; and that capital should be looked upon not as a "sum of value" hovering over goods, but as the "complex of goods" itself.*

Among these many variations the author gives his approval to that of Adam Smith, giving it "a more distinct formulation," † however, and distinguishing between the wider and narrower conceptions, acquisitive (private)



and productive (social) capital. Of the former he says: "Capital in general we shall call a group of Products which serve as means to the Acquisition of Goods. Under this general conception we shall put that of Social Capital as narrower conception." ‡ The problem of interest, he thinks, is connected with private or acquisitive capital, not necessarily with social or productive capital.

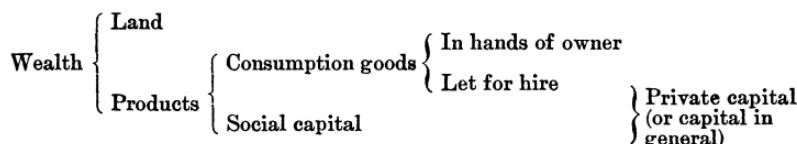
We may represent in the above diagram the results of the author's long inquiry. The large circle represents the entire material wealth of society. The outer band

* *Positive Theory*, pp. 43-59.

† *Ibid.*, p. 31.

‡ *Ibid.*, p. 38.

marked L is land, or all natural agents. The entire circle P contained within that band consists of "products." The next band, C G, is consumption goods. The concentric circle S C, within, is social capital, and the oval C is "capital in general," or private capital, embracing all social capital and, in addition, such consumption goods as are let for hire. Representing this in another way, we have the following classification: —



What judgment now is to be passed on this reading of the capital concept? We must be struck by the fact that in the matter of simplicity the results of the author's study are not ideal. But he asserts with a tone of triumph that the "conception meets all our logical and terminological requirements. Logically, it is unassailable." * He concludes with this hopeful prophecy: "If, then, unbiassed people are ever to agree on the conception of capital, we may expect that this will be the one chosen." † His strongest ground for such a hope was the fact that he had made a place under the name "capital" for the two most generally employed concepts, and that the concept of social capital is the one widely held,—"products used for further production." He did not claim much originality for this part of his work. He says: "The heavy part of the *Positive Theory of Capital* lies in the theory of interest. In the other portions of the subject [he seems to mean the concept of capital] I was able, at least on the whole, to follow in the footsteps of previous theorists." ‡

The immediate reception of this portion of the author's work largely justified his hopes. His careful restatement of the concept and the authority of his name undoubtedly

* *Positive Theory*, p. 59. † *Ibid.*, p. 60. ‡ *Ibid.*, Preface, p. xxiii.

added to the prestige it already enjoyed. The more usual point of attack on the author has been his interest theory, not his capital concept, which has been far less questioned,*—in fact, has usually been accepted as flawless. Some protests, however, have already been raised against it; and, although it is still the dominant concept, discontent with this and other features of the older economic thought has been spreading. The earnest teacher, using the available text-books, and attempting to correct their treatment in accord with recent criticisms, is in despair. To one who has watched the course of the discussion it might seem that the service of Böhm-Bawerk's work, so far as it touches the capital concept, lay not in settling, but in reopening the whole question. Remembering, however, that most students still accept Böhm-Bawerk's statement of the concept, we turn to a group of thinkers who would give other readings to it; and we shall confine our study to the leading representatives of two differing views on the question.

II. J. B. CLARK.

This part of the Austrian writer's work, especially, was attacked by Professor John B. Clark,† who defends the productivity theory of interest, though that point we need not raise in this paper. His own views had been published ‡ at the same time as the German edition of the *Positive Theory of Capital*; but more attention was attracted to them, it is probable, as a result of this controversy than at their first publication. I shall not enter into the merits of the discussion as a whole. It was carried on

* *E.g.*, Horace White on "Böhm-Bawerk on Capital," *Political Science Quarterly*, vii. 133-148; General Walker, "Böhm-Bawerk's Theory of Interest," in *Quarterly Journal of Economics*, vi. 399-416.

† "The Genesis of Capital," *Yale Review*, ii. 302-315; "The Origin of Interest," *Quarterly Journal of Economics*, ix. 257.

‡ *Publications of the American Economic Association*, iii. (1888).

with great skill, with some later confessed misunderstandings, and at times, perhaps, with an over-subtlety which makes it exceedingly difficult to follow. I shall simply try to state the issue involved as to the capital concept.

In every-day speech and in the writings of economists there have been, since before the time of Adam Smith, two broadly marked ways of thinking of capital: one views it as concrete goods, such as tools and machines; the other, as the money expression, or market value, of the goods. It is probable that no writer has long kept from the use of the term in both these ways, no matter what his formal definition. Frequently both uses will be found on the same page. A few writers only have chosen to frame their capital concept in accord with the second of these ways of thinking.* Böhm-Bawerk has taken the former way, defining capital as the concrete goods; and in the interest problem he insists on the need of comparing goods of like kind and quantity. Clark declares this to be an error, and defines capital in harmony with the second way of thinking of it. He says, "There is in existence a permanent fund of productive wealth, expressible in money, but not embodied in money; and it is this that business men designate by the term capital."† The concrete things which make up this fund he calls "capital goods." In contrast with this list of goods he often speaks of his kind of capital as "true capital," or "pure capital," which, as he says elsewhere, "resides in many unlike things, but consists of a single entity that is common to them all. That entity is 'effective social utility.'"‡ Again, he says: "Capital goods are . . . vanishing elements. True capital . . . is abiding."§ Elsewhere he clothes his definition, which he calls "the common and practical sense of the term," in these words: "Capital is an abiding fund of wealth employed in production."||

* *Positive Theory*, pp. 33, 34. † *Yale Review*, ix. 307.

‡ *Publications of American Economic Association*, iii. 91.

§ *Yale Review*, ii. 308. || *Quarterly Journal of Economics*, ix. 257.

Needless to say, Böhm-Bawerk defends himself vigorously against the charge of "side-tracking" the theory of capital in defining the concept as he had done. The controversy turned about the phrase "goods of like kind and quantity," and the question as to the real nature of the comparison of present and future goods. Clark holds that it is two sums of "quite different goods" that are compared. Böhm-Bawerk saves his phrase by the expedient of making the "goods of like kind and quantity" mean "dollars," "exactly as does Professor Clark."* This is not a novelty with him; for, as he points out,† he had "in many, and in some of the most important, passages of the *Positive Theory of Capital* . . . used money as an illustration of the proposition that present are worth more than future goods." Without quite indorsing Clark's comment on this point, we may agree with him that this appears to surrender the entire question concerning the formula "of like kind and quantity."‡ What meaning is in the phrase "the technical superiority of present goods over future goods," when those goods are made to mean dollars? What becomes of the elaborate analysis of the roundabout method of production?§ Certainly, it means something very different, when the present goods employed are taken merely as circulating medium which is not in the normal case retained by the individual producers nor used up by society. The truth is, Böhm-Bawerk had fallen into the common error of using two different conceptions of capital, and at the first attack was found in an untenable position. This phase of the controversy seems to end by showing that the conception of capital made use of by Böhm-Bawerk himself, when he discusses business problems, takes the money expression, and differs in important ways from that of concrete goods expressed in his elaborately framed definition. A word as to the relation of these two views. It is to be noted that both parties

* *Quarterly Journal of Economics*, ix., 116.

† *Ibid.*, 263.

† *Ibid.*, 380.

§ *Positive Theory*, pp. 17-23.

agree that economists must study wealth under both these aspects. Böhm-Bawerk admits that he does so. The point against him is that, while framing his concept and basing his argument as to interest on the first, he introduces the second view, in some ways inconsistent, without recognizing the shift of concept. And Clark says that "the issue is not whether concrete capital goods are or are not to be studied at all. For certain purposes they have to be studied."* But he would confine the term "capital" to the sum of wealth or "permanent fund" constituted of the perishable goods.

The conception championed by Clark is of great significance; and, before going further, it is important to consider some peculiarities and difficulties in Clark's way of setting it forth.

(1) The discussion is confined by Clark at the outset to social capital.† He uses this term in a wider sense than Böhm-Bawerk does (as is explained in the next paragraph), but not differently as to the exclusion of consumption goods. Social capital is that kind which Böhm-Bawerk himself considers to be productive. Clark gains thus a distinct tactical advantage over his opponent in upholding the productivity theory of interest, though that is not of immediate importance to us here. The fact, however, that Böhm-Bawerk does not note this limitation, but fights the issue on the ground chosen by his adversary, shows that he himself is caught in the confusion of the two concepts, and is the strongest evidence of the inexpediency of the division of capital into social and private.‡ On the other hand, the fact is of immediate interest to us that Clark gives this narrower content to the term "capital," confining capital to "material forms of wealth that do not directly minister to consumers' wants,"§ and does not make a place for acquisitive consumption goods, nor ex-

* *Quarterly Journal of Economics*, ix. 258. † *Yale Review*, ii. 304.

‡ A fuller discussion of this point is given later, p. 21.

§ *Yale Review*, ii. 307.

plain the interest from them, as is done by Böhm-Bawerk in his concept of private capital. In this respect the concept evidently needs addition or correction.

(2) In the second place, Clark's explanation of the genesis of capital is inconsistent with his own concept. Land used productively—for example, a farm, a waterfall, a mine, any rare and useful natural agent—is capital according to his definition. In his earlier utterances, such things are in plain words included.* In the later articles this is still the inevitable implication of the definition,—“a fund of productive wealth expressible in money”; but a reader new to the author's doctrine would find no specific statement to this effect, and there would be small chance that the meaning in question would be gathered. The whole logic of the argument is against it. “The genesis of capital,” we are told, “takes place by a process for which the good old term ‘abstinence’ is, as I venture to maintain, the best designation.”† This does not seem to give a place in capital to natural agents. There are, we are told, two classes of accumulators: the typical capitalists, who save to make permanent additions to their capital; and the quasi-capitalists, who “save sums now, intending to spend them later.”‡ There is no place here for the unearned increment of a newly discovered mine, which to-day forms for many men the chief productive wealth expressible in money. If this is saving, it is a sense so unusual as to require a special explanation by the author; and it is difficult to see how it can consistently be given. There certainly would be no attempt to evade the real question by assuming that the dollars that bought the mine had been saved; for the mine may not have been sold, and, if so, it is irrelevant to the issue. If the definition adopted by Clark is consistently applied, there are necessarily many things forming a part of capital which never have been saved, and which never have called for

* *Publications of American Economic Association*, iii. 95, 112.

† *Yale Review*, ii. 309.

‡ *Ibid.* 303, 304.

abstinence, as Clark employs that term.* In fact, Clark seems to show here, as did Böhm-Bawerk, some traces of the error of the labor theory of value, so difficult to throw off.†

(3) Again, Clark would seem to err by extreme statement in making it in the nature of capital to be a "permanent fund." "In creating capital, we put the personal good away from us forever. . . . An addition to the social fund of perpetual capital is brought into existence." "Nothing generates capital that does not add to the permanent fund of invested wealth."‡ "True capital . . . is, in the absence of untoward accidents, perpetual, and yields perpetual fruits."§ Many other expressions emphasize the same thought. Now this evidently does not apply at all to the author's quasi-capitalist, who saves to spend later. That, of course, is why he uses the term "quasi," which evades the issue. Either such savings are capital (in which case why quasi?) or they are not capital, and may be omitted from the concept. The author, after stating that a part of the accumulation of capital is due to these quasi-capitalists, proceeds as if there were none such. If better or more tools and larger stocks were accumulated, and were then allowed to deteriorate while in use without being replaced, our author must certainly call them capital while they lasted; and, if so, the element of permanency is no essential part of the capital concept. Indeed, if a fund of productive wealth must be permanent to be capital, we cannot be sure that there is any such a thing; for we have not the gift of prophecy, and all

* *Yale Review*, ii. 309. I must dissent from Clark's opinion that the term "abstinence" is, in the discussion of value theories, to be applied only to the first act of saving. See this view in *Quarterly Journal*, ix. 260, 261. In a more useful sense it is a power of choice that is continuously present during the foregoing of the right to consume wealth, at every moment during which a man could convert the principal of interest-bearing capital into a source of present enjoyment.

† This point is treated more fully later, p. 30.

‡ *Yale Review*, ii, 309.

§ *Ibid.*, 312.

human interests are fleeting.* Clark himself says, "Capital normally will never perish"; but "this is not saying that no capital ever perishes in fact." † This says clearly enough that permanency is not an essential mark of the concept, and makes meaningless both the word itself in that connection and a number of sentences, besides those quoted, in which this feature is emphasized as a vital mark of the concept. There is a valid thought in his contention, but it is not that capital is in its nature perpetual. There is ambiguity in the phrases "increase of capital" and "decrease of capital," because they may mean either some of the parts or the whole. A part of capital may perish while the total amount of capital is preserved or even increased. Clark would confine the expression to the whole of capital, and objects to the form of statement "capital is destroyed" when the value of the concrete goods is passed on to other goods. But what of the cases where the total value is not preserved? The zeal of his attack carries him to an extreme and untenable expression, and makes him insist upon an unessential.‡

(4) Less successful than his contention against Böhm-Bawerk about "goods of like kind and quantity" is Clark's claim that capital "synchronizes all industry and its fruition," that because of capital "industry and its fruition are simultaneous." There are several objections to such an expression.

(a) I am not quite in sympathy with the point of view of either of the parties to the discussion, but between them it is a question not as to what happens,—not of fact,—but of expression; and Böhm-Bawerk's opinion commends itself when he says § it is a "figure of speech" that is "misleading" to say that the real wages, consisting of "consumption goods" received to-day for work done on goods not to be completed for years, are the "true and

* This has already been observed by Fisher, *Economic Journal*, vi. 530.

† *Yale Review*, ii. 309.

‡ See further on this, *infra*, pp. 15-16.

§ *Quarterly Journal of Economics*, ix. 124, 125.

immediate fruit" of, *e.g.*, the tanner's labor.* To the tanner, of course, they are the "immediate" and only fruits, since they are all he gets for his labor. The question is, does it seem logical and expedient from the general standpoint in economic discussion to consider and speak of them as the "true fruits" of that day's labor? The expression chosen appears to say merely that these things express the present market value of the laborer's services; that is, it is a roundabout and somewhat whimsical way of stating the truism that they are the man's wages.

(b) Further, it may be urged that the inaptness of this expression is more apparent when something other than subsistence goods are considered. In the example chosen of the tanner, it is at least debatable whether it is best to call the shoes he gets to-day the "true fruit" of his labor. But in the case of the laborer receiving food and clothing for digging a canal or working on a marble palace, it is straining the point further to use the expression. If here, too, his wages are called the "true fruit" of his labor, it still appears that the peculiar power ascribed to capital is due only to one part of capital, the finished consumption goods. No matter how large a stock of capital in the form of machines, buildings, and raw materials may be on hand, if there be no stock of finished goods, labor and its results are not synchronized.†

(c) A further objection to this way of conceiving of the nature of capital's work is that it would, if true, be applicable only to "produced" forms of capital. As indicated by the phrases "industry and its fruition," "labor and its fruits," it implies vaguely the labor theory of value as to the origin of capital. The picture of labor continuously flowing into the reservoir of capital and consumption goods at the same time flowing out‡ is not satisfactory as

* *Yale Review*, ii. 312.

† This is a somewhat different presentation of Böhm-Bawerk's argument in *Quarterly Journal of Economics*, ix. 125-128.

‡ *Yale Review*, ii. 310, 311.

applied to products; for it implies that the inflow of a quantity of labor forces out consumption goods whose quantity is determined or measured by the quantity of inflowing labor. The value of consumption goods flowing out, however, is greater in varying degrees than the value of labor flowing in; and it is only through their values that we can compare at all the quantities of the two streams. Further, it is not a happy figure; for it suggests that all the goods that are a part of capital will eventually become consumption goods, whereas in many cases this is not expected nor desired. It is significant that Clark in describing the process speaks only of "the materials, raw and partly wrought," of which an article for consumption is made. He ignores machines and durable goods. It is only in the gradual passing on of their value, as they are used up, to the things that are made by them, that machines and more durable agents can be said to ripen at all.* Even Clark's value conception of capital, however, though it explains this point better than does the concrete concept of capital, does not avoid the difficulty. The point may be most clearly seen in the case of natural agents, which, as we have noted, are in Clark's treatment included in the "fund" of capital. If we consider not merely capital in the form of products more or less fitted for consumption, but, as his concept requires, durable natural agents also, the phrases we are criticising appear hardly short of absurd. Clark forgets this kind when he says: "The capital goods that are set working are not permanent. They pass away, and are replaced."† Natural agents, the field, the waterfall, in so far as they are thought of apart from betterments upon them, have not been originated by labor; and they are not in a state of transformation that will eventually ripen them into consumption goods.

* Böhm-Bawerk appears to have very much the same conception of products ripening into consumption goods, in his circles of production periods. See *Positive Theory*, 93, 106-108.

† *Yale Review*, ix. 312.

They stand there to be used by man, if he wishes, as an aid in securing future harvests or products; but neither the things themselves nor their value or money expression are "synchronizing" labor and its fruits. If there is any synchronizing, it is done not by this, but by some other part of capital, and is, therefore, not an essential mark of the capital concept.

(5) It is likely that to some points in what has been thus far said the answer will be made that they are due to misunderstanding of the author's meaning. No doubt the author attaches great weight to the contrast he draws between true capital and capital goods, which it might seem I had neglected. The reply is a criticism stronger, perhaps, than any of the foregoing against Clark's capital concept. There is in his mode of thinking of this contrast an over-abstraction that is neither expedient nor logical; and there results in his presentation some inconsistency of thought and statement. In some passages, capital is said to be as concrete a thing as can be. It "consists in goods. It is not an abstraction, and it is not a force independently of matter. It has substance. If at any instant we could collect in one place all the material forms of wealth that do not directly minister to consumers' wants, we should have the fund for the moment before our eyes in substantial embodiment."* Capital is thus "productive wealth, expressible in money, but not embodied in money."† That is plain enough, and we are still on solid ground: we are not puzzled here by the "entity, effective social utility," of the earlier statement,‡ where capital does not consist of the concrete things, but is the "fund that resides in many unlike things," and is "embodied in instruments of production." This has the unpleasant flavor of Marx's labor jelly, though it need not be taken as more than a loose, convenient way of expressing the market value of the concrete things. But

* *Yale Review*, ii. 307.

† *Ibid.*

‡ *Publications of American Economic Association*, iii. 11.

the development that follows of the paradoxical contrasts between capital goods and true capital appears to be mischievous subtlety. The very adjectives "true" and "pure" applied to capital are suspicious. Why not plain "capital"? We are told that "the genesis of capital goods is unlike that of capital."* It would seem that, if capital consists of concrete goods, then making concrete goods is making capital. But the author says not, unless those goods are net additions to the stock; that is, more than replace the capital destroyed in the same time. "Build an altogether new engine. That is creating capital. Renewing an old one is only preserving capital."† The simple mode of expression that some capital has been created, while an equal amount has been destroyed, is thus not to be permitted. Surely, since capital has substance and consists in goods, there is only one way in which its amount can be preserved while some of it is being destroyed; and that is, by "creating" more capital to replace that destroyed. And what would be the circle within which the balance must be struck? Would it be the individual, the national, or the world economy? If John builds a machine while his neighbor lets one decay, then has John created no capital? It is true that care is often needed, in speaking of any increase, to indicate whether it is a net increase or not, but no more needed in the case of a "fund of capital" than in that of a herd of cattle. The striking antithesis of the goods that make up capital with the capital itself appears thus to be over-abstraction and unreality.

To sum up the objections to Clark's conception of capital: ‡—

(1) It includes only goods used in "production," and

* *Yale Review*, ii. 308. † *Quarterly Journal of Economics*, ix. 275.

‡ This article was in the editor's hands before the appearance of Professor Clark's latest work, *The Distribution of Wealth*. The views of the author on the capital concept there expressed show no essential change from those here examined, and the criticism stands as first written.

does not recognize nor prepare to explain the interest-bearing qualities of consumption goods.

(2) It is confused in attributing the genesis of capital to abstinence (as he uses that word) while including in capital natural agents for whose origin no abstinence was required.

(3) It errs in making permanency, or perpetuity, an essential mark of capital.

(4) The statement that an important, if not the chief, function of capital is to "synchronize industry and its fruition" is a misleading figure of speech. It can be affirmed, even figuratively, only of the part of produced goods that is to be at once consumed, and is quite meaningless as applied to the durable natural agents which are a part of his capital concept.

(5) The conception, starting from concrete goods, is developed away from them into a more abstract, dematerialized "pure" or "true" capital, which is put into contrast with real things.

III. IRVING FISHER.

We now turn to the notable contribution of Professor Irving Fisher.* He lays a basis for his own treatment with sound statements as to the requisites of a good definition, and careful studies of the definitions and usage of the leading authorities. He believes that a mistake has been made as to the real character of the problem, that it is not one of the classification of wealth, and that unavoidable difficulties "attend every effort to delimit capital from 'other wealth.'"[†] His own conclusion, then, is that capital should be taken to mean simply all wealth at a point of time.[‡] It is contrasted not with other wealth,—for that category is exhausted,—but with the same wealth as a flow during a given period, and at a rate. The con-

* In three articles, *Economic Journal*, vi. 509; vii. 199, 511 (1896-97).

† *Ibid.*, vi. 513.

‡ *Ibid.*, p. 514.

trast, then, is between a stock and a flow, and still more important "between stock and *rate of flow*."* This conception is ingeniously developed, use being made of mathematical terminology, and is applied in criticism of rival definitions. Finally, the attempt is made to show how it could be employed in the discussion of various economic questions.

To grasp more fully the import of this radical proposal in economic terminology, let us note in what regards it differs from the conceptions we have been considering.

(1) Its content is wider than that of any foregoing concept. Böhm-Bawerk excludes all natural agents and most consumption goods from his wider concept, private capital, and excludes the other consumption goods used in acquisition from the narrower concept of social capital. Clark appears at first to include all natural agents, though excluding all consumption goods, then treats capital as if it originated only in labor, and did not include natural agents, and finally mystifies us by his contrast of capital goods and pure capital, leaving us in doubt whether he would include any concrete things as such. Fisher's concept takes them all in, sweeps down the wall between the old concept of capital and consumption goods on the one hand and natural agents on the other. To my mind this suggestion is the most fertile part of Fisher's discussion.

(2) It agrees with Böhm-Bawerk's and differs from Clark's conception in considering that the concrete things should be estimated by physical measurements, and not in their money expression. The objection to Clark's view in this regard, he says, "is not that this summation of value is inadmissible, but that it is a secondary operation. Objects of capital are antecedent to the value of those objects. . . . Wheat must be measured in bushels before it is measured in dollars."† He, therefore, finds it a "serious objection to Clark's definition" that he endeavors "to in-

* *Economic Journal*, vi. 515.

† *Ibid.*, p. 530.

clude different sorts of capital in the same fund, reduced to a common equivalent in terms of value." Here, in my opinion, is a radical defect in Fisher's view. (a) It is true that wheat must "be measured in bushels before it can be measured in dollars," but it must also be tested for quality. One will not value as highly a small apple as a large one, a sour as a sweet one, a rotten as a sound one. We could thus say that apples must be measured in sweetness before being measured in value. But an inventory of all possible measurable qualities, while helpful in estimating, would not itself express the amount of capital, for the things might after all have no value at all. (b) Though an intelligible description of the quantity of any single kind of goods could be made in such terms, yet the total quantity of many different kinds of goods cannot be expressed for economic purposes in a single sum excepting in terms of value. A capital account in which five pounds of feathers were added to a bushel of wheat and a yard of cloth would give a curious total. (c) Fisher is inevitably betrayed into inconsistency when he comes to estimate the quantities of wealth, and express in percentages the relation between the stock and rate of flow; for this can be done only by comparison of values.*

(3) This conception shares what I believe to be an error, common with it to both of the others,† in that it makes the income of a community consist of "streams . . . of the very same commodities" ‡ that compose the total capital. This, again, implies that all things of value originate in labor, and are on their way towards the goal of consumption goods: whereas many things, standing where they are, may be made to push other things towards that goal, though never getting nearer to it themselves; *e. g.*, machines and natural agents. Fisher means by income a "flow of things" (material things), and rejects Mr. Edwin Cannan's conception "of income as a flow of pleasure," or

* *E.g.*, at the very outset, *Economic Journal*, vi. 515.

† See as to Clark, *supra*, p. 14.

‡ *Economic Journal*, vi. 514, ff.

satisfactions.* The book-keeping of society will be thrown badly out of balance if services be not counted as a part of income ; but, even if services be included as a part both of income and of capital at a point of time, there are still many things, as above indicated, that are a part of Fisher's capital only, and never are a part of the flow of income. They never have been made for consumption, and never will be fitted for consumption.

(4) A final objection is that the term "capital" is made synonymous with wealth, and two good words are employed in the same sense. Fisher anticipates this objection, and recognizing its validity, if the fact be true, defends by saying that wealth presents the two aspects of income and stock (capital),—differences important enough to merit separate terms. This defence fails, if the point made in the preceding paragraph is sound. By wealth, Fisher must mean here "all wealth." As I have shown, all capital must be considered wealth, and all wealth capital by Fisher's definition, though all wealth has not been nor will all wealth become income. Wealth and capital thus are synonymous, while income differs from them not merely as an aspect, but in the group of goods which composes it.

The concept under discussion is credited in part to Professor Simon Newcomb, is indorsed in the main by Mr. Edwin Cannan, and has received the approval of Professor Hadley in his *Economics*. Its merits and the ability of its presentation by Fisher have surely attracted other followers to one or another feature of it. It has therefore a worthy standing among the competing conceptions. Some portions of the presentation are most illuminating, and must be looked upon as distinct contributions to economic theory. Careful distinction between a stock of capital regularly employed, the turn-over in a business, and the income from a business have not always been

* *Economic Journal*, vi. 534.

made; and confusion has resulted. But this difficulty is not such as to call for the construction of the capital concept with that distinction as the central thought. On the whole, there is little probability that this conception will triumph, its defects both as to consistency and expediency being of an essential nature, its points of merit being capable of adaptation to another and better central thought.

We now have finished our review of the more notable recent conceptions, rivals to that put forward by Böhm-Bawerk. Though confined to a few names, it has necessarily taken a somewhat wide range in the points considered. It is hoped to use the fruits of this study in the next two divisions, in which the analysis of Böhm-Bawerk's conception is resumed. I shall then go on to formulate more positively a capital concept which will be free, I trust, from the many objections that have been considered.

IV. PRIVATE AND SOCIAL CAPITAL: AN ILLOGICAL DISTINCTION.

I have sought in the foregoing to give a clear statement to the capital concept of Böhm-Bawerk and its recent rivals, those of Professors Clark and Fisher, to show the main points of difference, and finally to criticise in some detail the conceptions of these later writers. We are now prepared to return to the criticism of Böhm-Bawerk's views which were the starting-point of our study, and, taking up more thoroughly than before some of the issues involved in his definition, to work towards a positive conclusion.

The distinction between private and social capital is considered by Böhm-Bawerk to be of the very greatest importance, and he deems his clear distinguishing of them to be one of his highest services to economic theory. The failure to distinguish them, he thinks, is the chief

reason for the "false" productivity theory of interest. If the difference is not seen between capital, the source of interest, and capital, the tool in production, interest, he argues, is naturally thought to be due to productivity. But, if it is clearly seen that a part of interest-bearing capital is not a tool in production, then productivity cannot be the one essential explanation of interest. This point was evaded by Clark, as I have shown;* for he simply considers social or productive capital, and omits mention of acquisitive consumption goods. It was not raised in his discussion with Clark by Böhm-Bawerk himself, for his attention was fixed on other points; but in his reply to Walker it is put very clearly. "There is interest without any production whatever. . . . I refer, for example, to interest on consumption loans and to the return on durable consumption goods, such as rented houses, pianos, and the like."† Private capital is, by his view, social or productive capital plus some other things, enjoyable and more or less durable products let for hire to the user. Of what importance is this class of goods that makes all the difference between the two concepts? He has here mentioned rented houses and pianos: the stock illustration is the masquerade suit let by the costumer. A complete list of these articles would include a very small amount of wealth compared with that in social capital, and, doubtless, very much less than that in the rest of consumption goods. Yet it would be wrong to claim on this account that it is not worth while to make a difference in the concept. Logical differences of any importance call for distinctions in concepts, no matter how slight be the quantitative differences. I pass, therefore, to a criticism of the logical grounds for such a distinction.

(1) There is no need to make an independent conception on account of this group of income-bearing things, if an explanation can be given that will dispose of them in a

* *Supra*, p. 9.

† *Quarterly Journal of Economics*, ix. 253.

simpler way. Here are two houses lived in by the owners in two neighboring towns. They are called consumption goods, bearing no income. Owner A moves into another house, paying \$300 rent, letting his own for an equal sum. His house then becomes acquisitive capital. Owner B does the same, and his house becomes capital. Chance or choice leads each to occupy the other's house. Each, through a broker and without knowing who his tenant is, pays the other \$300 yearly, and both houses are capital. Shortly, they move back into their own houses, which at once cease to be capital; and the "income" of each man is reduced \$300.

The puzzle is an old one. It compels us to say that a thing becomes capital or ceases to be capital not because of any change in its physical or economic nature, not because it is more or less serviceable to the community, not because the use to which it is put is altered, but simply because the man who owns it does or does not happen to be the one who enjoys that use. Now Böhm-Bawerk himself, in his interest theory, has given us a hint of the way such an absurdity can be avoided without the use of a separate concept,* though he does not see the application possible here. The person who rents a house buys the "material services" of the thing during a definite period. The whole value of the house is simply the sum of a long series of uses. To the logical eye, though not to the technical eye of the law, the tenant or user is the owner of the thing during the time, with only such conditions as will insure its safe keeping and return at the close of the period. It may be looked upon as a sale to the tenant of a use or a group of uses defined by a period of time, and with the agreement to return the use-bearer when a group that has not been purchased begins to mature. The value of the unpurchased uses does not appear in the transaction, but they are bound up with the

* Especially in *Positive Theory*, 339-349.

use-bearer that is given and returned. The dancer is often compelled to deposit the price of the masquerade suit when he takes it out. After the ball is over, his subjective valuation having fallen, he is the gainer by returning it at an agreed price which to the costumer represents its worth as stock to him. The latter keeps such things in stock because there are, on an average, enough such sales to pay his trouble, expenses, and a return on that amount of stock. Such rented consumption goods, being owned for the time by the user, form, then, no exception to the general class of consumption goods. The income of the dealer or the house owner is explained as a profit gained in exchange, like that of any other retail merchant, and includes a payment for services, risk, and income from stock employed. To explain such transactions as the sale of a group of uses (which is actually the temporary sale of the use-bearer) is entirely consistent with Böhm-Bawerk's treatment of interest, and makes needless the elaborate distinction between private and social capital.

(2) The foregoing would seem to be a valid reply, at all events as an *argumentum ad hominem*, to Böhm-Bawerk; but it may appear to some to be too elaborate and artificial. The distinction in question may then be attacked on the still stronger ground that it confuses things economic and legal. It is based on an unclear view of the relations of economic and contract interest. Let us look at this distinction. Contract interest is the interest actually paid by one person to another as the result of an agreement. Economic interest is the advantage attributable to the possession and use of a thing during a given period, regardless of its ownership. There is economic interest when a man uses his own plough to raise a crop or his own storeroom as a place of business.* Now, in the case of all the things included under social (productive) capital, contract is based on and tends to conform to economic interest. In all

* I should add, if the income is estimated as a percentage of the capital value.

such cases it is economic interest that we seek to explain logically through the economic nature of the goods. Contract interest is a secondary problem,—a business and legal problem,—as to who shall have the benefit of the income arising with the possession of the goods. It is closely connected with the question of ownership. Only by accident, mistaken judgment, or old agreements, can the contract interest connected with social capital continue when economic interest does not. The two are related as cause and effect. Yet in the case of the relatively small group of consumption goods let for hire there is in the current view here represented by Böhm-Bawerk only contract interest, there being supposed to be no economic interest on which it is based. The economist's problem in distribution is essentially an impersonal one, to determine the economic contribution regardless of the question of legal ownership. Here, if it be held that there is no economic interest or contribution, we have an anomalous case where the final answer to the interest problem must contain a mixture of economic and legal elements. No solution of this contradiction will, I believe, be found short of the view that contract and economic interest are normally inseparable. By "normally" I mean that no man contracts to pay interest, or, being free to choose, actually does pay it, unless he has reason to believe that he thereby will gain the benefit of what must be called economic interest of a somewhat greater amount.

(3) This brings us to another objection to the distinction between social and private capital; namely, that it involves a wrong conception of the nature of income. I shall maintain that income must be looked upon as a series or group of satisfactions, not as a series or group of material things. Though scattered authority may be found for this view, it is at variance with the views alike of Böhm-Bawerk, of Clark, and of Fisher, as well as those of the great majority of economists, and requires explana-

tion and defence. The thesis is that the economic goods which are "produced" either by human effort or by the material services of goods must, in their last analysis, be looked upon as satisfactions. Böhm-Bawerk notices this view as expressed by Roscher, and rejects it;* yet the view is one peculiarly in harmony with the psychological treatment of value which Böhm-Bawerk favors. Indeed, it seems to me the view to which that value theory logically and inevitably leads. Roscher fails to apply this thought consistently, as Böhm-Bawerk rightly shows;† and with that we will not concern ourselves. The view suggested looks upon all material goods as means of production or capital, their value being derived from the states of satisfaction to which they minister or which they enhance. Böhm-Bawerk's objection to this lacks validity. He says: "Any unbiassed person can see how unfortunate this is. Without due cause it obliterates the very important distinction between the production of goods which satisfy want and their consumption. It christens, for example, the idler as a zealous producer, always thinking how he may produce the personal goods of satiety, of ease, of contentment, and so on." It needs only to be replied to this that the idler in such case would be wrongly christened. The term "means of production" must be confined to objective means of producing a subjective state, not to subjective states, to Buddhistic dreams that unite the dreamer with Nirvana. The pleasure of basking in the sun is a fact of which economic theorists must take note; but that pleasure can be secured usually by the use of free goods, and thus is not an economic satisfaction. It becomes an economic satisfaction when it is conditioned on the control of some scarce material agent or can be secured only by effort. The test, then, of economic personal goods or satisfactions is dependence on either objective things or persons, or on

* *Positive Theory*, p. 44.

† *Ibid.*, p. 45.

reaction against the outer world by the man seeking the satisfaction. If the objection of Böhm-Bawerk is urged beyond the extreme and inapplicable example he has given, and is applied to the personal services of one man for another, it leads to the old and abandoned distinction between productive and unproductive labor. We do christen many men "as zealous producers because they are producing the personal goods of satiety,"—in other men. Such services must be counted as ephemeral forms of wealth, enjoyed or consumed at the moment of their production. This is no more obliterating the distinction between production and consumption than eating a hot cake fresh from the griddle obliterates that distinction. The two things are as logically separable in thought when they occur simultaneously as when a second or a decade intervenes. We have ceased to consider it essential to "productive" labor that it should be first embodied in material form, however fleeting. The same untenable distinction is adhered to almost universally in the case of the services of material goods. Their productive contributions must be put on the same basis as those of labor, to be measured by the intensity of the wants they aid in satisfying and the psychic states they help to produce. The house of the mill-owner is, logically considered, producing directly, his mill is producing indirectly; for only after a devious journey will the contribution of the mill reach its goal in the satisfaction of wants. Our economic book-keeping can be made to balance only when *real* income be looked upon as a flow of pleasure in all cases, not as a flow of goods in some and a flow of pleasures in others, as is done generally now.

(4) This view makes possible the correction in the concepts of private and social capital of another fault which calls for our fourth and last objection to this part of the almost universally accepted treatment. The fault is this. Interest is looked upon as connected with a special class

of goods: it must be recognized to be connected with everything of value.* The value of anything is built up on its uses or services to men. Wherever there is a postponed use, that use is subject to a discount. Its present worth is less than its worth will be at maturity. Consider the case of consumption goods. In the orthodox view a bushel of apples, kept by the grocer from fall till spring, is capital, and normally shows economic interest in enhanced value. Bought in the fall and stored in the cellar by the housewife, it is a consumption good; and economic interest is absent. But that early purchase can only be rationally explained as we take account of the increment of value on the apples thus stored, and this is economic interest. Larger purchases in advance effect, of course, economy of labor, and bring an additional motive to make them; but this is not saying that the whole saving is wages, and that no interest is gained.

The radical consequences of this view are evident. It erases all distinction between the essential economic character of so-called productive and consumption goods. The term "consumption goods" may still be conveniently retained to mean, as at present, the material good in its final form in the hands of the one intending to use it; but it ceases to be an essential economic category. Every material good and every human service has value only as it is a condition to the satisfying of a present or prospective want. The abiding value of the diamond is built on no more substantial foundation than its flash and sparkle. Market values are the capitalized economic contribution of objective agents to psychic states; and these states are the final, highest, only essential economic products.

To sum up the objections to the concepts of private and social capital:—

(1) The distinction between them rests on a supposed

* Here we develop some of the thoughtful suggestions of Fisher, though differing with his view in ways already suggested. See *Economic Journal*, vii. 525.

difference in the interest-bearing character of different groups of consumption goods. This difference can be explained in a simple way that makes needless an additional concept.

(2) The distinction between them rests on legal, not on economic grounds, and involves a confusion of economic and contract interest.

(3) The distinction rests on an incomplete and illogical view of the nature of income and the services of goods. The income that needs to be explained by economic theory is the flow of objectively created pleasures coming to the individual and the community.

(4) In these concepts the interest-bearing quality is confined to the conventional production goods and such consumption goods as yield contract interest. Many actions connected with "consumption goods" are left unexplained. The interest phenomenon is found wherever there is abiding value.

Our conclusion, then, is that the distinction between social (or productive) and private (or acquisitive) capital rests on illogical grounds. Böhm-Bawerk thinks it a great advantage that "notwithstanding the material difference there is between capital, the factor of production, and capital, the source of interest, it is not necessary in [his] reading to make two conceptions of capital that are entirely foreign to one another."* We must assert on the other hand that the two conceptions he has given us are so largely foreign to one another † that, instead of an advantage, it is a source of much confusion that they are called by the same name, as every careful reader of Böhm-Bawerk's work must have noted. For example, he defines capital at the beginning of his discussion ‡ as "nothing

* *Positive Theory*, p. 40.

† *Ibid.*, p. 61. He says here, flatly contradicting his own words just quoted: "Substantially, [the conception of social capital] is a quite independent conception. In every essential respect (in definition, in scientific employment, and in scope) it stands on entirely independent principles."

‡ *Ibid.*, p. 22.

but the complex of intermediate products which appear on the several stages of the roundabout journey." By this he evidently means his social capital; and he then proceeds to show that "capital in general"—that is, private capital—is something more than such a complex. The reader is frequently in doubt which one of these different concepts is designated when the word "capital" is used. A great advantage will be gained when, dropping unessential distinctions, we are able to save the term from double meanings.

V. CAPITAL AS PRODUCT: THE LABOR-VALUE FALLACY.

Thus far we have considered only the question of the uses to which goods are put as determining whether they are capital. Böhm-Bawerk's definition, however, in common with nearly all usage, limits the conception of capital in another way; namely, with regard to its origin. As well private as social capital consists of a "group of products." In the foregoing, I have widened the term productive as applied to consumption goods; but the products there mentioned (feelings, satisfactions), being ephemeral, do not increase the capital stock existing at a given moment. And, being final products, these states of feeling cannot be used in further economic processes, and do not, therefore, widen the definition Böhm-Bawerk has given us. The test so far applied to these concepts has been alone that of economic function. Confining capital to material "products," as does Böhm-Bawerk, applies an additional and distinct test,—that of economic origin,—and must be separately examined.

The purpose of the adjective "produced" in the phrase "produced means of production" is to exclude land. While conceding that there are some good reasons for including land under capital, Böhm-Bawerk declines to do so for the reasons which we may enumerate, as follows:—

1. Land is immovable. Capital is, for the most part, movable.
2. Land is a gift of nature. Capital is a result of labor.
3. Land cannot be increased, capital can be.
4. The social and economical position of the landlord is essentially different from that of the capitalist.
5. Property in land and property in movables are justified on essentially different grounds, and they are commonly attacked by quite distinct people.
6. Land is the special agent in a kind of production [agriculture?] that is economically distinguished by many important peculiarities.
7. The income from land differs in many ways from income from capital.
8. Using capital for all material means of acquisition leaves us no name for produced acquisitive instruments.
9. Popular usage does not put land under capital, but opposes the two.
10. Usage does not apply the term "interest" to the income from land.*

He concludes that "it is most convenient to keep land quite distinct from other kinds of productive wealth," and that "there is a considerable balance in favor of defining capital as the 'produced means of acquisition,' and against the inclusion of land." †

Of this formidable list it must be said that not a reason given, considered singly, is free from flaw, some are quite mistaken, and collectively they are not conclusive. The worth of 1 is destroyed for purposes of definition by the limitation "for the most part." It is not that a definition may not be based on a difference in degree, where qualities grade off from one extreme to another; and, if something of importance depends on the degree, it may often be expedient to draw a line of division more or less arbitrarily somewhere. Here, however, it is not so. Things, like houses, ditches, trees, that are as firmly fixed

* *Positive Theory*, pp. 55, 56.

† *Ibid.*, p. 56.

as the soil itself and whose value would be quite lost if they were moved, are, without a question, included in capital. Turning to the other part of the statement, that land is immovable, it is found quite as untrue. Parts of land are shifting from day to day. It is usual for those who follow this definition to consider that a thing ceases to be land and becomes capital the instant it is moved by man's agency or effort; but to appeal to this to prove the point is to confound "unmoved" with "immovable." No matter is immovable. To say that "land" means something that has not been moved by man begs the question, and this is evidently an untenable definition of nature or material agents. Some writers who have followed out such reasoning have been led to narrow the essential concept of land down to mere situation,* or, differently expressed, to the "geometric relations in which any part of it stands to other parts."† This is a very different idea from the one here defended by Böhm-Bawerk, and would not be consistent with some of the other reasons of this list. Reason 1 in the list appears to be an illogical use of reason 2, it being falsely assumed that results of labor are necessarily movable in the relative sense in which we can use that term of material things, and that gifts of nature are immovable. No such parallelism exists, and the two reasons are often in conflict.

Passing 2 and 3 for later and fuller consideration, we take up 4 and 5, which appeal to social and personal grounds of distinction, not to economic and impersonal ones. Here is again a confusion of the political or legal question of ownership with the real economic question, the function performed or contribution made by material agents. This difference, moreover, in the social position of landlord and capitalist, so emphasized, can be shown to rest on accidental historical grounds which we cannot now discuss. Again, the emphasis of this difference is largely due to the misleading terminology which is under

* Commons, *Distribution of Wealth*, p. 29. † Marshall, 2d ed., p 198.

discussion. And, finally, I would contest the statement that property in land and "movables" is justified on essentially different grounds. They must be, and are by most political theorists of to-day, justified on exactly the same ground.

In 6 and 7 appeal is made to differences in economic nature. In reason 6 there is again the fallacy of thinking of land as a field used for agriculture. It must be said, first, that land, in the sense of the word under discussion,—*i.e.*, natural agents,—is an indispensable agent of the milling industry, carpentry, and every other art, as well as of agriculture. To call land the "special" agent of agriculture because that part of land which consists of fertile soil is necessary for plant life is to make a very crude distinction, based on no logical principle. At most a difference of degree only is involved, in that a larger area is usually needed to produce a given value of food than is needed to produce that value of other things; but the reverse is frequently true. Secondly, it may be said that "the important peculiarities" (the chief of which no doubt is thought of as the law of diminishing returns) here attributed to agriculture are in no way peculiar to it. The belief that they are rests largely on the basis of a false terminology. As to 7, likewise, we have a begging of the question; for the differences in our ways of regarding interest and rent are primarily due to the terminology whose correctness is under discussion. Finally, it must be noted that, when Böhm-Bawerk comes to explain interest from durable goods,* he refutes the statement that income from land differs in many ways from income from capital, and, "obeys many distinct laws of its own."† He then finds that the two incomes "have one common final cause."‡ "Land rent is nothing but a special case of interest obtained from durable goods."§

* *Positive Theory*, pp. 339-357. † *Ibid.*, p. 55. ‡ *Ibid.*, p. 357.

§ *Ibid.*, p. 355. The explanation given by Böhm-Bawerk is open to serious criticism.

In 8, 9, and 10 the appeal is to usage which is shifting, and by no means uniform in the direction Böhm-Bawerk assumes. As to 8, the reply is that it will be an advantage not to designate by special names the group mentioned if it is shown, as will be done later, that such a group should not, either for logical or practical purposes, be marked off from the other parts of capital. Indeed, it is one of the most important advantages of a different terminology that it gets rid of the figment in question. Reasons 9 and 10 contain doubtful statements. Popular usage and economists, even those who favor Böhm-Bawerk's terminology, in many cases class land under capital, speaking of the investment of capital in land, and reckoning the land with the man's capital thereafter. So, when a loan is made in money, we are always told that the thing really borrowed is what the money buys: if machines, then it is really these for which interest is paid; if a farm, then it is this for which interest is paid. The moment you give the money aspect to the loan, no attempt is made to distinguish between the income from land and the income from other material agents.

I have left to the last reasons 2 and 3, which, stated together, read that land is a gift of nature and cannot be increased, while capital is a result of labor and can be increased. This thought is the central one in the distinction: it is the parent of all the other reasons; and we here trace to their source the errors just considered. The trail of the serpent, the mark of the labor theory of value, is over the whole treatment of capital as the product of former labor. Böhm-Bawerk does not escape it. He has indeed given a most able refutation of that theory,* and takes frequent opportunities to stamp it with his disapproval. In his later volume he says that the phrase "stock of accumulated labor" is a metaphor,† and, again,

* *Capital and Interest, passim*, but particularly pp. 237-387.

† *Positive Theory*, p. 33.

that it is employing a mere "figure of speech" to speak of capital as "previous labor" or "stored-up labor."* In refuting socialist views, he has shown that capital "is not exclusively 'previous labor'"†; but he is not free from his own criticism when he adds: "but it is partly and, indeed, as a rule, it is principally, 'previous labor'; for the rest, it is valuable natural power stored up for human purposes."‡ Later he again makes greater limitations on the proposition, and says: "The asserted 'law,' that the value of goods is regulated by the amount of the labor incorporated in them, does not hold at all in the case of a very considerable proportion of goods; in the case of the others, does not hold always, and never holds exactly. These are the facts of experience with which the value theorists have to reckon."§ In these statements we have the view that the value of capital is not in proportion to previous labor, and that capital owes its value partly to scarce and valuable natural powers. The same idea appears elsewhere. "Capital—to keep the same form of expression—is 'stored-up labor,' but it is something more: it is also stored-up valuable natural power."|| The part attributed to natural powers reaches at times the vanishing-point as Böhm-Bawerk shows;¶ but he does not draw the obvious inference that the part of labor reaches at times the vanishing-point, and that many products, many things classed by him as capital, are exclusively "stored-up" natural powers. Why continue to apply the phrase "products of labor" more than "products of nature" to those things which owe to labor proportions of their value varying from all to nothing? Where there is no labor, would Böhm-Bawerk cease to call the thing capital? Certainly not, must be the answer, if that is the only difference. To take his own illustration, used against Rodbertus for another purpose: "If a lump of solid gold

* *Positive Theory*, p. 53.

† *Capital and Interest*, p. 341.

‡ *Ibid.*, p. 341.

§ *Ibid.*, p. 387.

|| *Positive Theory*, p. 99.

¶ *Capital and Interest*, p. 341.

in the shape of a meteoric stone falls on a man's field,"* will it not be capital as much as any other piece of gold? According to proposition 2, which we are criticising, it would not be capital, but land, being a "gift of nature."

In truth, Böhm-Bawerk does not concern himself about any such difficulties, but speaks literally of capital in the very phrase he has called a metaphor. He says, "The next stage of the controversy brings us to the question whether we are to give the name of capital only to the *products of labor* that serve for acquisition, the 'previous stored-up labor,' or are to include land."† Again, he approves the same usage when he says, "Mill has so far yielded to the pressure of facts as to admit that capital is itself the product of labor, and that its instrumentality in production is, therefore, in reality, that of labor in an indirect shape."‡ It seems to Böhm-Bawerk self-evident that capital is produced. "Every child knows that a piece of capital, say a hammer, must be produced if it is to come into existence."§ Now there might be some uncertainty, taking the sentence alone, as to just what is meant here by "produced"; but the context shows that this means just what the last-quoted sentence does, that capital is produced by labor. In the discussion of the roundabout method of production he consciously omits || from the productive powers the uses of land "for the sake of simplification," and assumes that the annual endowment of powers consists only of "labor years." There is the danger in this omission that it may accustom the author and his readers to the thought that capital indeed consists of stored-up labor alone. In fact, most products are due to the use of both sources of production; but supposing he had omitted "for the sake of simplification" the labor years, and had assumed that the productive powers of land alone produced all goods. Such cases, in

* *Capital and Interest*, p. 338.

† *Positive Theory*, p. 55.

‡ *Ibid.*, p. 98.

§ *Ibid.*, p. 117.

|| *E.g.*, *Ibid.*, pp. 89 and 106.

fact, occur where a fixed flow of goods from natural agents has an annual value without the aid of man. Yet it probably never would have occurred to Böhm-Bawerk to speak of such goods as products if, as is usually the case, they were not fully fitted for consumption, hence were intermediate goods. I have looked in vain not only in his writings, but through economic literature, for an admission that capital may be a "product" of unassisted nature as fully as it can be the product of labor. Yet there seems no valid reason why that view should not be held, the only reason why it is not being that the labor theory of value still influences the thoughts and utterances of men.

Our immediate study, let us recall, is the validity of a distinction between capital and land, on the ground that the one is and the other is not the product of labor. We have just seen the difficulty of applying it in the case of capital. We must now note that Böhm-Bawerk gives up the attempt to apply it strictly to land. He says that improvements on land, so far as they are completely incorporated with it, "are to be kept separate from capital *for the same reasons* * which made us keep land itself separate from capital." † Evidently, the author deceives himself. He has forgotten one of the most important reasons for the distinction, the one we are discussing; namely, that capital is the result of labor, and land is not. In this case he is classing the improvements with land, not because, but in spite of the fact that they are the results of labor. He sees the difficulty, and in a note says: "I may be accused of want of logic here on the ground that such improvements are always products which serve towards further production, and therefore come under our definition of capital." ‡ But he argues, "The criticism is correct as to the letter, but wrong as to the spirit." What can the spirit of the distinction be that is

* The Italics are my own. † *Positive Theory*, p. 65. ‡ *Ibid.*, p. 65.

so opposed to the words of the definition? We get this answer: "A stay propped up against a tree is certainly not the tree itself, but an outside body. But who would still call it an outside body if after some years it had grown inseparable from the tree?"* So far as this has any application at all, it disproves what the author wishes to support; for we should not call a stick around which the tree had grown a part of the tree. The tree has the unity of life and organization, and the stay is no part of it. The essential thing for us, however, is that here also is a set of cases in which Böhm-Bawerk finds it practically impossible to make the distinction between capital and land depend on whether their source is in labor. Though the source of their value is in labor, some things are to be classed with natural agents because they are physically inseparable from natural agents. May we not ask why, if the labor is incorporated in the land, does not the land become capital? In some cases a touch of labor is all that is needed to "produce" goods of large value from natural materials, which are then called capital. Why call a combination of natural agents and labor land at one time and capital at another? A satisfactory reason, if there be one, has never yet been given.

To sum up the objections to the attempt to make the distinction between land and capital rest on the absence or presence of labor:—

1. Some capital, things treated as such by Böhm-Bawerk and others, is not the result of labor at all,—for example, the meteoric lump of gold, the annual crop of fruits on an untilled field, the yield of a mineral spring.

2. It is not logical to call capital a result or product of labor, any more than to call it a result or product of land. Nearly all capital owes in part its economic existence to labor; but its value is not measured by the "amount of labor," whatever that may mean, any more than it is

* *Positive Theory*, p. 65.

measured by the amount of uses of land. In fact, we have no way of expressing the amount of labor or of uses of land, except through their value.

3. If the mere presence of labor in producing the present values is what is meant by "production," then, practically, all land must be classed as capital; for there is little of it that has not had its value enhanced by labor applied to it.

4. The attempt to distinguish between the part of the value of a material thing that is due to labor and the part that is due to nature, keeping thus nature (or land) and capital distinct, is vain when once the labor has been spent. This is recognized by Böhm-Bawerk in certain cases, like permanent improvements on agricultural fields; but this case differs in no essential from every other case where scarce natural materials are united with labor. It is purely arbitrary to call some such combinations land, and others capital.

5. Finally, it is not true that land, as understood by the business man or the economist when he really comes to his problem, consists only of the gifts of nature. Large areas are made and reclaimed, and then are treated precisely the same way as the land that exists little changed since coming from nature's hand.

The reasons are so many and conclusive against this distinction that only the influence of the labor theory of value over those who think themselves emancipated from it can explain the persistence of the error. Yet this distinction is of the essence of Böhm-Bawerk's concept of capital. A consistent capital concept never can be based upon it.

VI. A RESTATEMENT OF THE CAPITAL CONCEPT.

We have seen* that Böhm-Bawerk holds the view that capital should be taken to consist of concrete goods, and that he opposes strongly any attempt to make "some kind of abstraction the essence of capital." † He does not think that capital should be spoken of as a "sum of value" or as "circulating power" or as "purchasing power." ‡ He believes that capital consists of "the common material goods called mills, looms, ploughs, locomotives." It is these, and not "an immaterial sum of value," which "can grind corn, or spin yarn, or plough up land, or carry a load." § We have seen that the attack of Clark on the work of Böhm-Bawerk assumes that the concrete conception is the one that Böhm-Bawerk makes use of, and that it is a false one. Our criticism of Böhm-Bawerk's treatment is on a different line; namely, that he has not one, but two concepts of capital,|| and that, while defining capital as if it could be spoken of without reference to value or the use of value expressions, he employs a value concept almost entirely in his reasoning on the interest problem. He makes a shift without being conscious of it, and makes use of the concept which Clark criticises him for ignoring.

In the concept of capital must be united both the thought of concrete things and that of their value, for their quantity is only measurable in a way that permits of comparison in terms of value. There is nothing metaphysical or abstract about this: it is what business men are doing constantly. They do not attempt to compare amounts of capital by physical standards of measurement. Things which lose their value are no longer counted as

* See *supra.*, p. 6. † *Positive Theory*, pp. 33, 34. ‡ *Ibid.*, pp. 58, 59.

§ See other definitions of capital as concrete in *Positive Theory*, pp. 22, 65, and *passim*.

|| One of which differs both from the social and the private capital; three, therefore, including both of them.

capital, no matter how large their amount. A change in the quality involving a change in value or in value of a given quality is at once counted as a change in the quantity of capital. And the idea of capital is carried over to all things of value, regardless of the question of the origin of the good. Böhm-Bawerk illustrates this usage frequently, for example, when he speaks of the "capital value of land,"* and, again, in making use of the word "capitalization" in explaining the value of land and interest arising from it.†

The business man, followed by the economist when he comes to discuss practical problems, starts with the thought of a man with a sum of money to spend for buying goods; and this buying is called "investing" his capital, or, as the word originally meant "clothing," the money in the form of other material things. When the money is thus "invested," it may be in the form of machines, buildings, lands, products on which labor has been employed. If the investment has been fortunate, we say, comparing the values with the value of the money expended, that the capital has increased. Now there is of course some danger of confusing capital with money, but no more than in every case where money is used to express the value of other goods. What is the capital? Either the money or the thing whose value is expressed in money. Money is itself a concrete thing, one in which the value of other things is expressed. It is this expression and measurement of market value which is the essence of the capital concept in much business usage, as well as in most economic discussion, no matter what may be the formal definition. This must be recognized in our definition.

Capital, in our conception, is an aspect of material things, or, better, it consists of material things considered in one aspect,—their market value. It is under this aspect

* *Positive Theory*, p. 344.

† *Ibid.*, p. 348.

that men have come more and more to look at wealth. The growth of a money-economy has made it more and more convenient to compare and measure the value of dissimilar things in terms of dollars. Things are thus capitalized. A writer, tracing the development of the wealth concept, has well pointed out that at one time wealth was looked upon as consisting of things of use to the owner, lands, flocks, herds,—use-values, to use the old phrase,—but that now it is looked upon as made up of things having exchange value, estimated in terms of the general standard of value in the community.* He would confine the term "wealth" to this latter concept, leaving the former without any special name; while the proposal here is to confine the term "wealth" to the former concept, and apply to the latter the term "capital." We thus adhere as closely as possible to popular usage. We should thus speak of a man's wealth as consisting of a number of acres of land, a herd of horses or cattle, a number of machines or ships; but we should say that his capital consisted of so many thousand dollars' worth of land, cattle, and the like. We say that a company has a capital of so many thousand dollars, and it is invested in buildings and machinery. The distinction between nominal capital and paid-up capital, and that between the capital stock consisting of paper certificates or shares and the capital of valuable material things, present no serious difficulties. Wealth and capital consist of precisely the same things. Wealth is the popular expression for goods the exact valuation of which is not stated. Capital is merely the ordinary market value expression of wealth. As we cannot give to the value of anything an arithmetical expression except in terms of some other concrete thing, we find it most convenient to express it in terms of money. The increase or decrease of capital is not measured by any ultimate standard. The changes in its money expression do

* Charles A. Tuttle, in *Annals of the American Academy of Political and Social Science*, i. 615, ff.

not necessarily reflect changes in the welfare of the community or of the individual. Over periods of time, changes in the quantity of capital can only be determined in a conventional way, by men's agreeing to accept one commodity or group of commodities as a standard. But at any moment the different portions of capital are homogeneous, and can be compared, added, or subtracted as we see men doing every day in business.

The term "property," again, is loosely used in place of wealth or capital, but can be clearly distinguished from them as the legal, not the economic, aspect of valuable material things. In short, "property" has as its essence the idea of legal right; and in connection with material things the important right is that of control. Ownership is simply a greater or less degree of control. The term "property," meaning legal rights of control, is broader; that is, extends to more things than the terms "wealth" or "capital," for it includes patent rights, legal monopolies, valuable agreements from men to do or not to do certain things, all having the common feature that the value is not attached to or connected with or attributed to a material thing, but is due to the legal right to control or limit some person's action. It seems inadvisable to try to make the content of wealth as large as that of property by considering that men become wealth to the degree that their rights are limited in the interest of others.* To illustrate the use of the terms "wealth," "capital," and "property," we would say that a stock of goods is wealth, it is (or it represents) a capital of \$10,000, and it is the property of Jones, and the property is worth \$10,000. If Brown holds a mortgage of \$5,000 on the property, however the lawyers may look at it, we must consider that Jones's property (or right) is only of the value of \$5,000. The property of Brown and that of Jones are both found within the capital of \$10,000, and in total value cannot

* Such a view is taken by Irving Fisher, *Economic Journal*, vii. 206.

exceed it. The value of the property owned never can exceed the capital that is the object of the legal right. Many absurdities in our laws of taxation have resulted from confusing the economic view of wealth with the legal question of ownership, and of confusing, still less excusably the mere paper evidences of legal rights with the wealth to which those rights apply.

To restate the definition that has here been arrived at: *Capital is economic wealth whose quantity is expressed in a general value unit.* It is used as applying to a single thing or to a group of things. There is no place in it for the distinction, the inconsistencies of which have been discussed, between individual and social capital. We do not call the services of things that minister directly to satisfaction unproductive while calling the personal services of men productive, even where nothing material results. We do not retain the distinction between consumption and production goods as essential in economic discussion. All valuable things of more than momentary duration are "intermediate goods," are capital, in that they are valuable because designed to satisfy future wants. While the definition thus sweeps away any limitation on the content of capital because of a difference in future use, it likewise sweeps away any limitation because of a difference in the origin or source of its value. Capital is not thought of as made up only of goods whose value is the result of labor. It has been shown that the prevailing distinction between "natural agents" and "produced agents" of production involves radical defects of logic and is practically not maintained. This definition is emancipated from the false labor theory of value. In regard to the contending views,—first, that capital consists of concrete goods, and, second, that it is the value of goods,—the definition harmonizes them by defining capital as consisting of the concrete things, but only when considered as homogeneous and comparable units of value.

I would not exaggerate the significance of the change here proposed in the capital concept, yet it would be folly to ignore the consequences its acceptance would involve for economic theory. Text-books must be rewritten, and many questions must be re-examined. This is not because the concept is unused by the older writers, but because they have used it without recognizing how different it was from their formal definitions and the concept employed in other parts of their work. Many students of recent years have felt the need of a readjustment of the leading economic concepts. This concept requires and makes possible such a readjustment. The current theories of land value, of rent, of interest, to a greater or less extent rest on the unsound ideas which have been criticised throughout this paper. On another occasion the writer will attempt to state the outlines of an economic system of thought in harmony with the capital concept here presented.

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